*Fig.1*

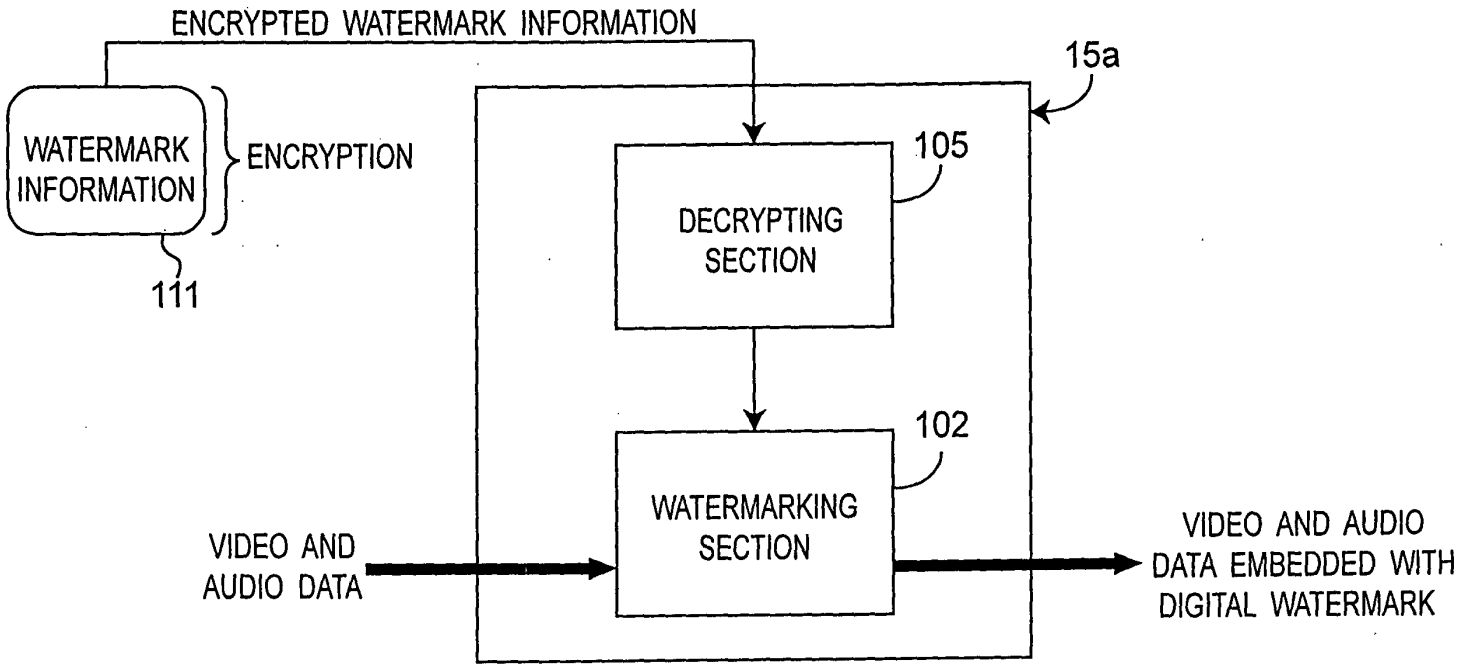

ENCRYPTED WATERMARK INFORMATION
15a
WATERMARK INFORMATION
ENCRYPTION
111
105
DECRYPTING SECTION
102
WATERMARKING SECTION
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK

Fig.2A

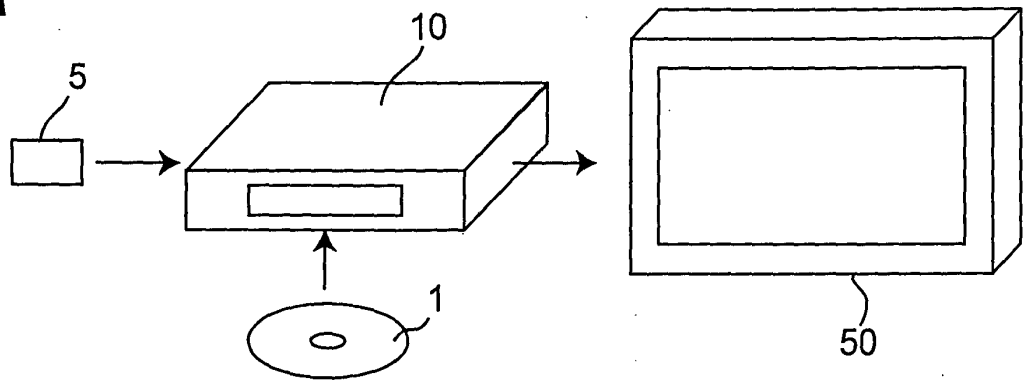

10
5
1
50

Fig.2B

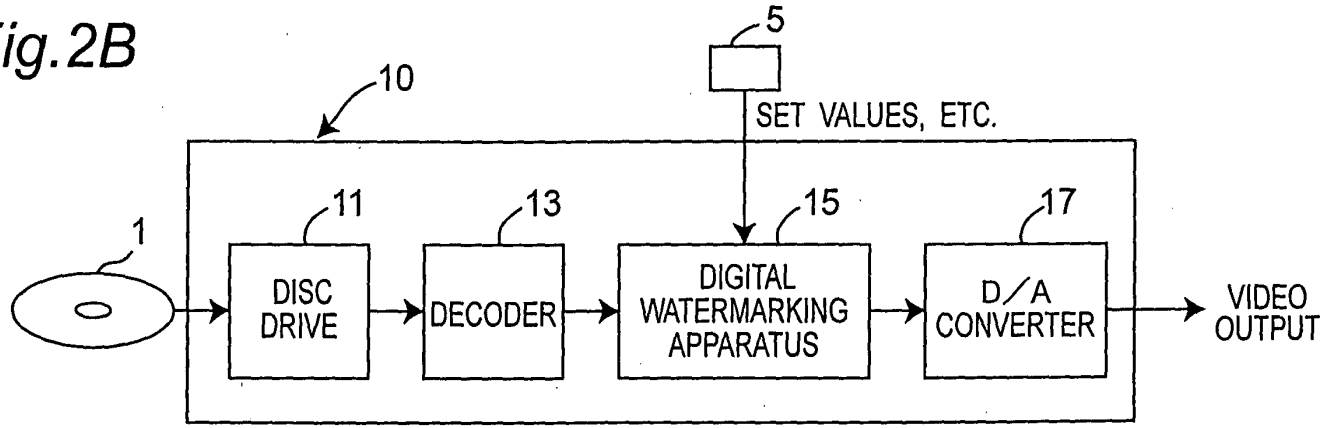

5
10
SET VALUES, ETC.
11
13
15
17
1
DISC DRIVE
DECODER
DIGITAL WATERMARKING APPARATUS
D/A CONVERTER
VIDEO OUTPUT

*Fig.3*

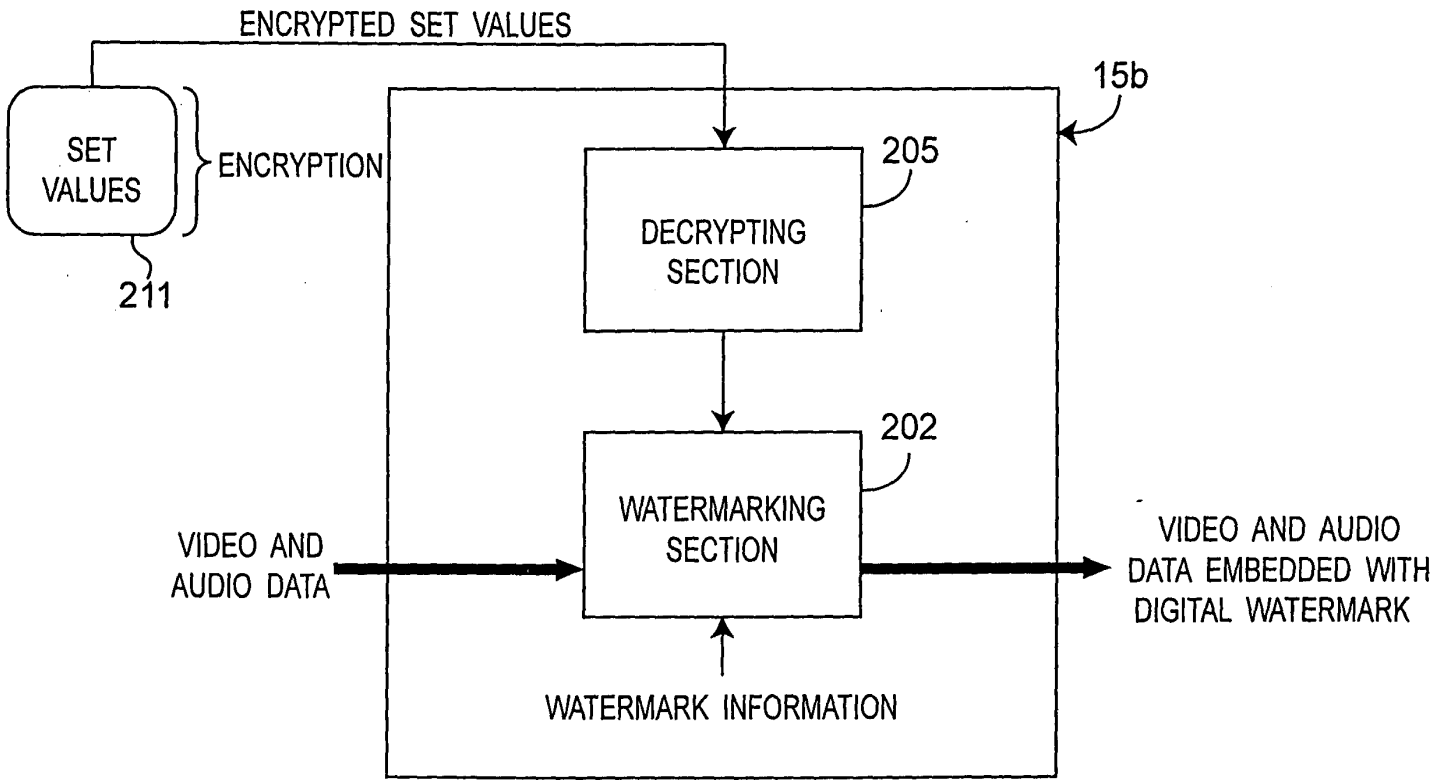

ENCRYPTED SET VALUES
15b
SET VALUES
ENCRYPTION
211
205
DECRYPTING SECTION
202
WATERMARKING SECTION
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK
WATERMARK INFORMATION

*Fig.4*

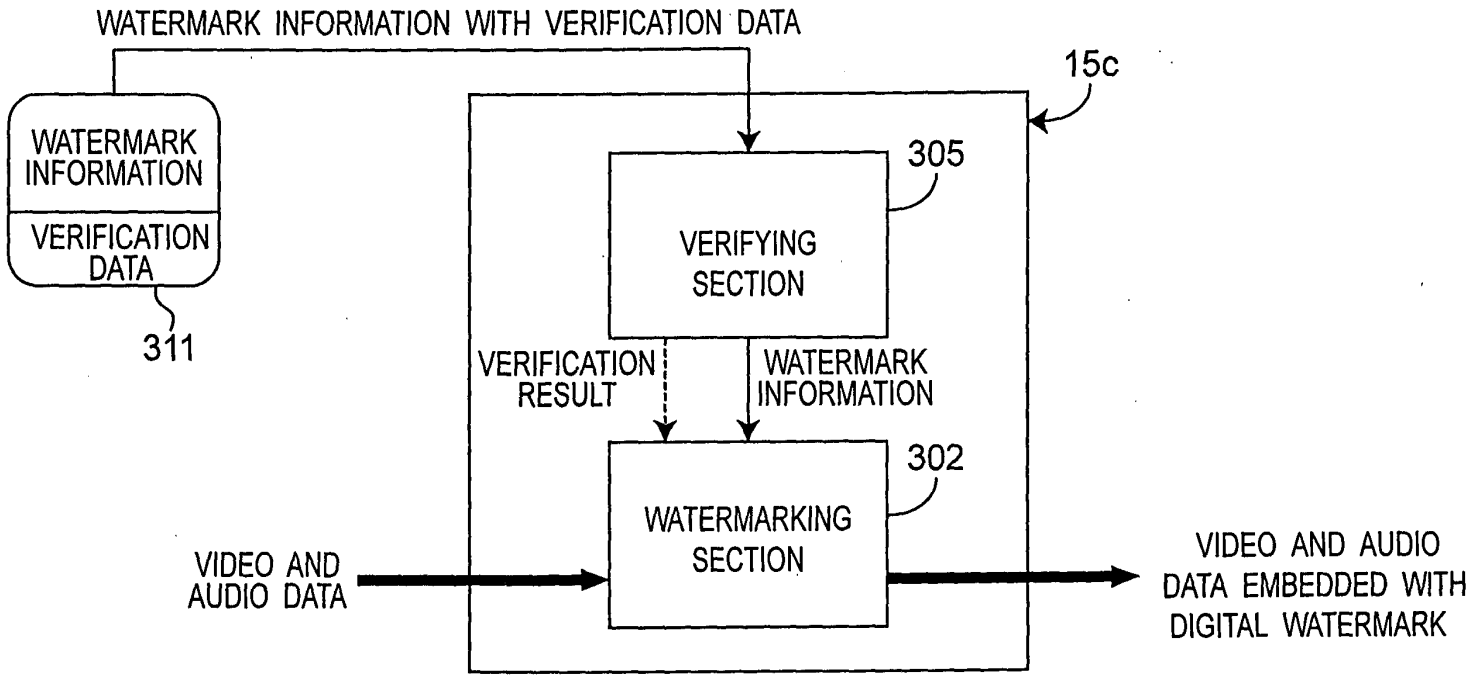

WATERMARK INFORMATION WITH VERIFICATION DATA
15c
WATERMARK INFORMATION
VERIFICATION DATA
311
305
VERIFYING SECTION
VERIFICATION RESULT
WATERMARK INFORMATION
302
WATERMARKING SECTION
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK

Fig.5

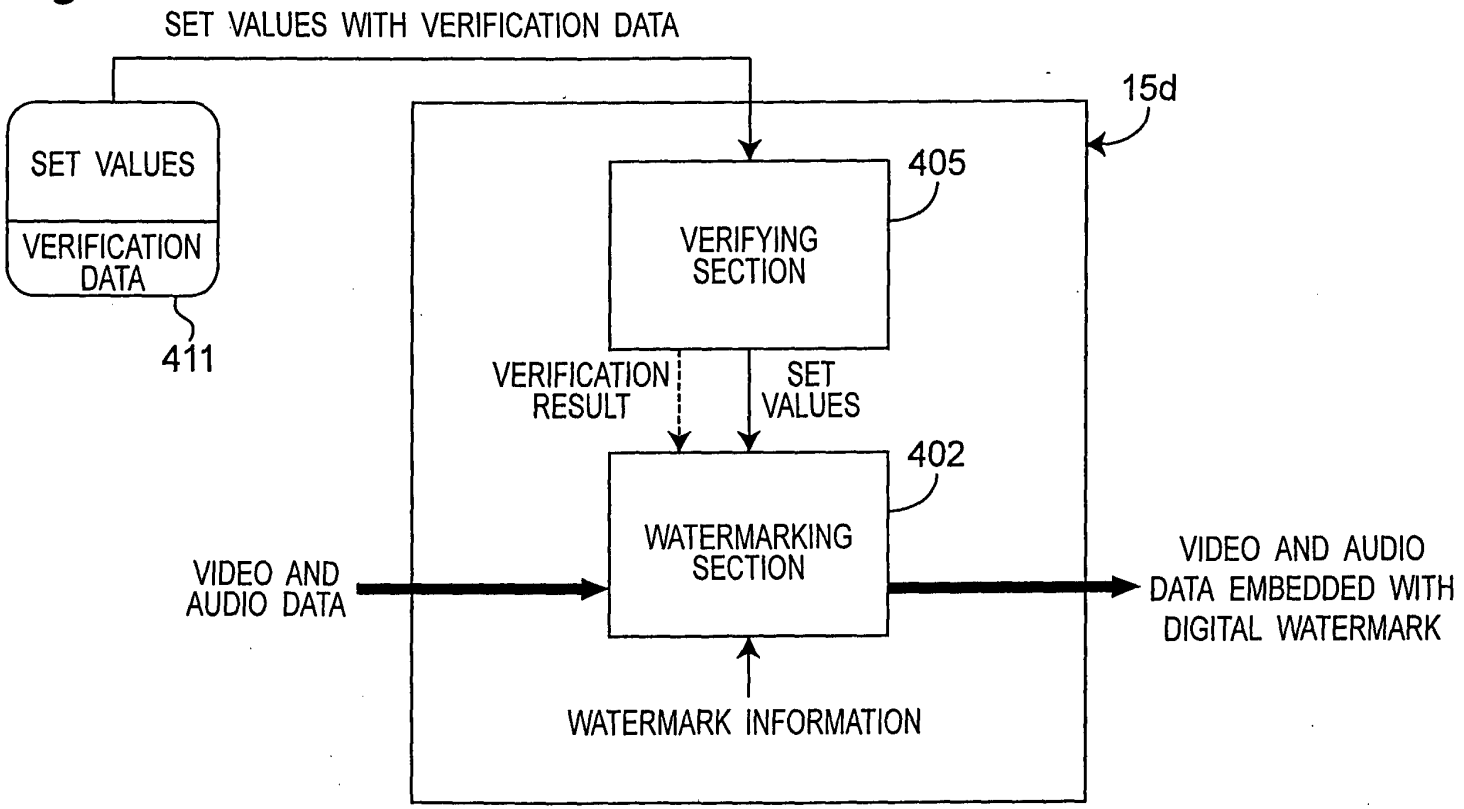

SET VALUES WITH VERIFICATION DATA
SET VALUES
VERIFICATION DATA
411
15d
405
VERIFYING SECTION
VERIFICATION RESULT
SET VALUES
402
WATERMARKING SECTION
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK
WATERMARK INFORMATION

*Fig.6*

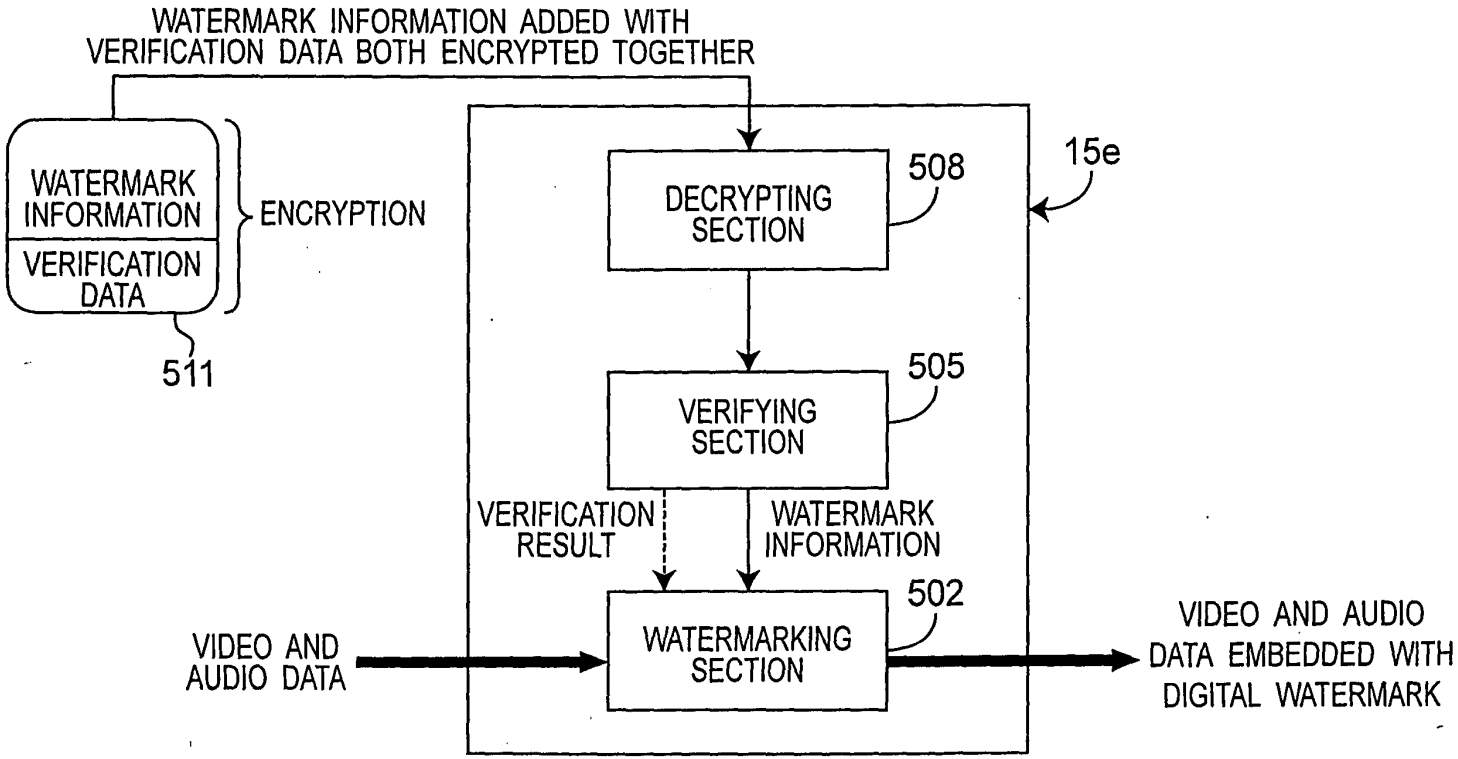

WATERMARK INFORMATION ADDED WITH VERIFICATION DATA BOTH ENCRYPTED TOGETHER
WATERMARK INFORMATION
VERIFICATION DATA
ENCRYPTION
511
15e
DECRYPTING SECTION
508
VERIFYING SECTION
505
VERIFICATION RESULT
WATERMARK INFORMATION
WATERMARKING SECTION
502
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK

Fig.7

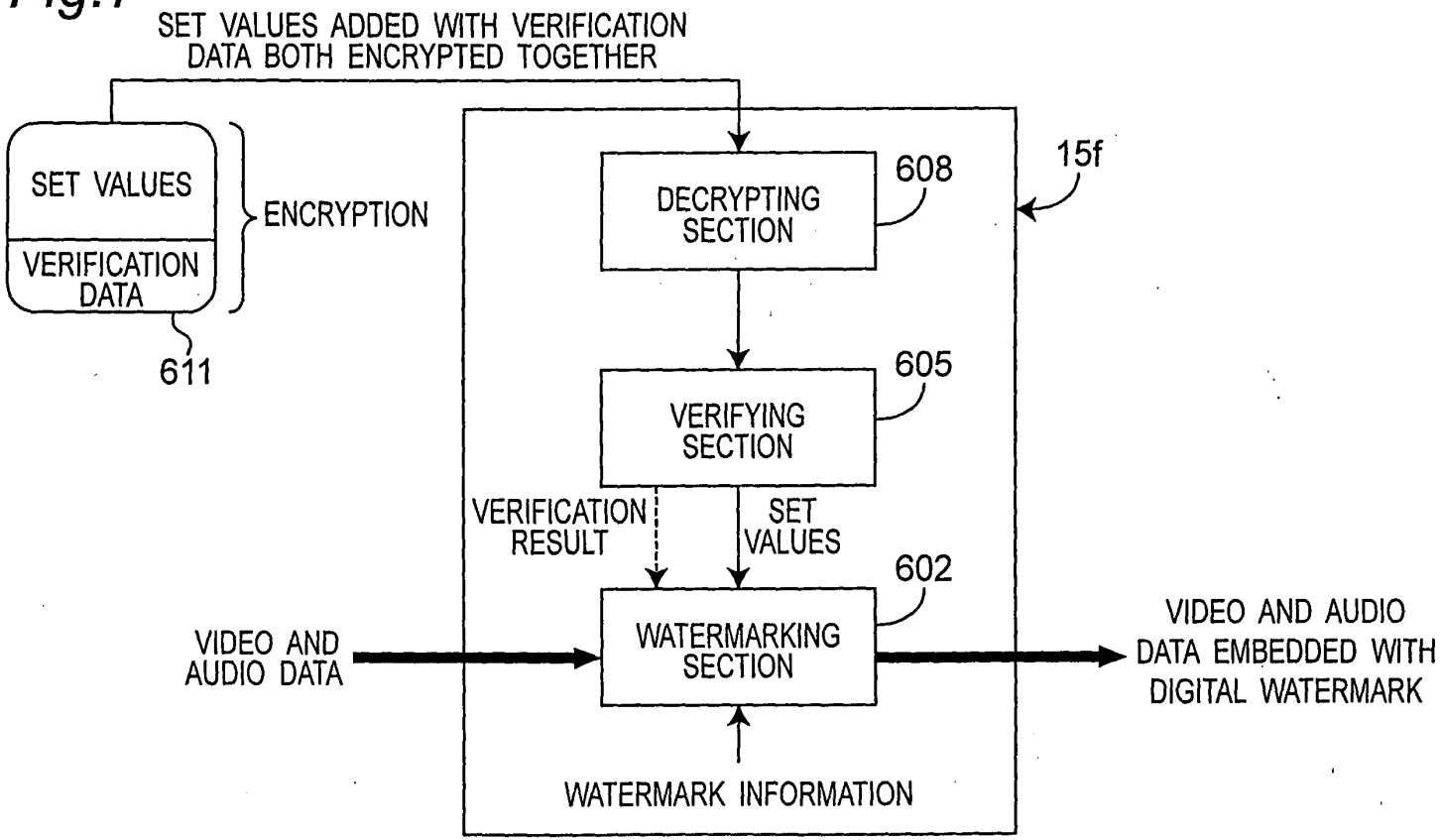

SET VALUES ADDED WITH VERIFICATION DATA BOTH ENCRYPTED TOGETHER
SET VALUES
VERIFICATION DATA
ENCRYPTION
611
15f
DECRYPTING SECTION
608
VERIFYING SECTION
605
VERIFICATION RESULT
SET VALUES
602
WATERMARKING SECTION
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK
WATERMARK INFORMATION

Fig.8

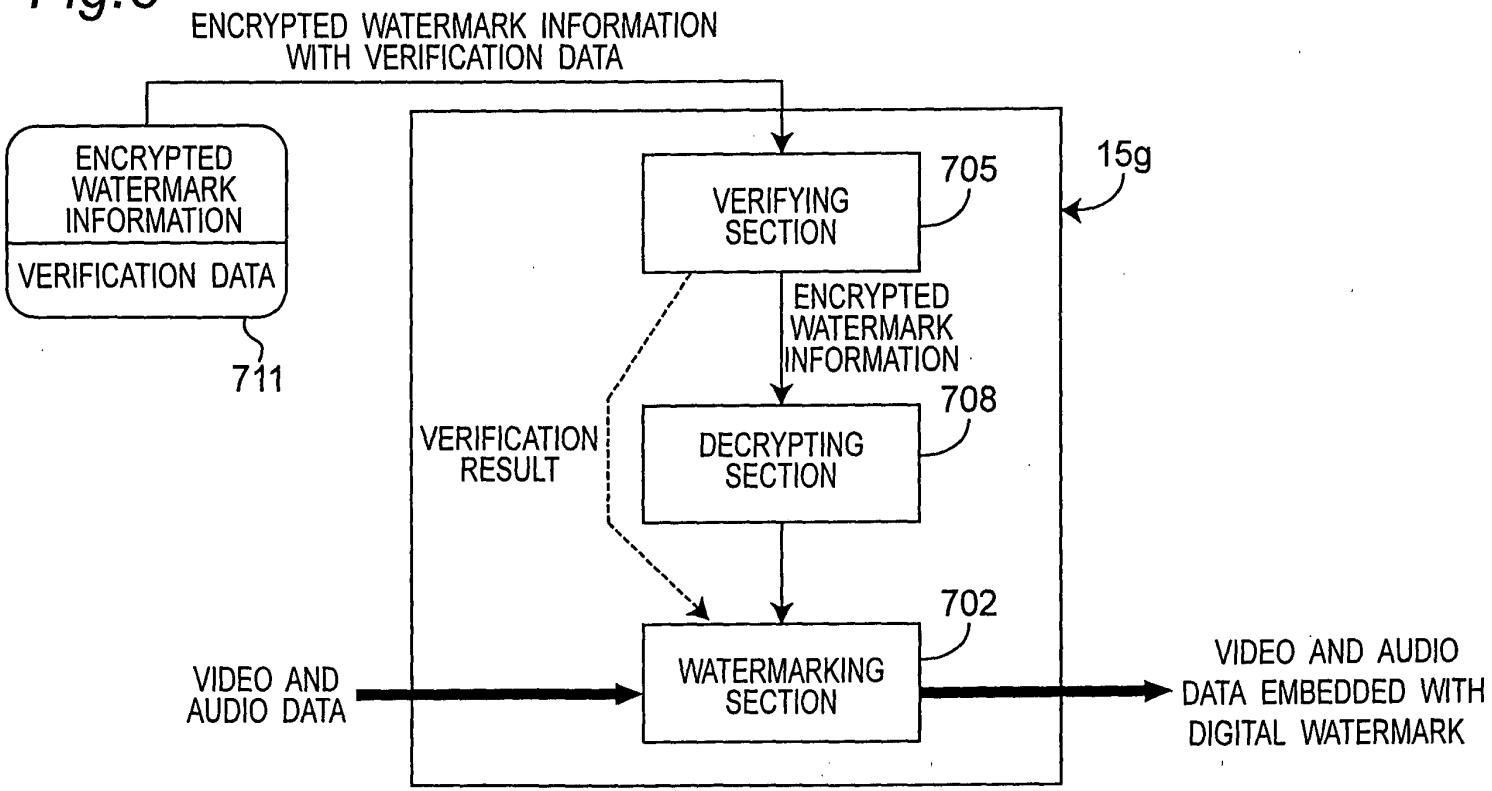

ENCRYPTED WATERMARK INFORMATION WITH VERIFICATION DATA
ENCRYPTED WATERMARK INFORMATION
VERIFICATION DATA
711
VERIFYING SECTION
705
15g
ENCRYPTED WATERMARK INFORMATION
VERIFICATION RESULT
DECRYPTING SECTION
708
WATERMARKING SECTION
702
VIDEO AND AUDIO DATA
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK

Fig.9

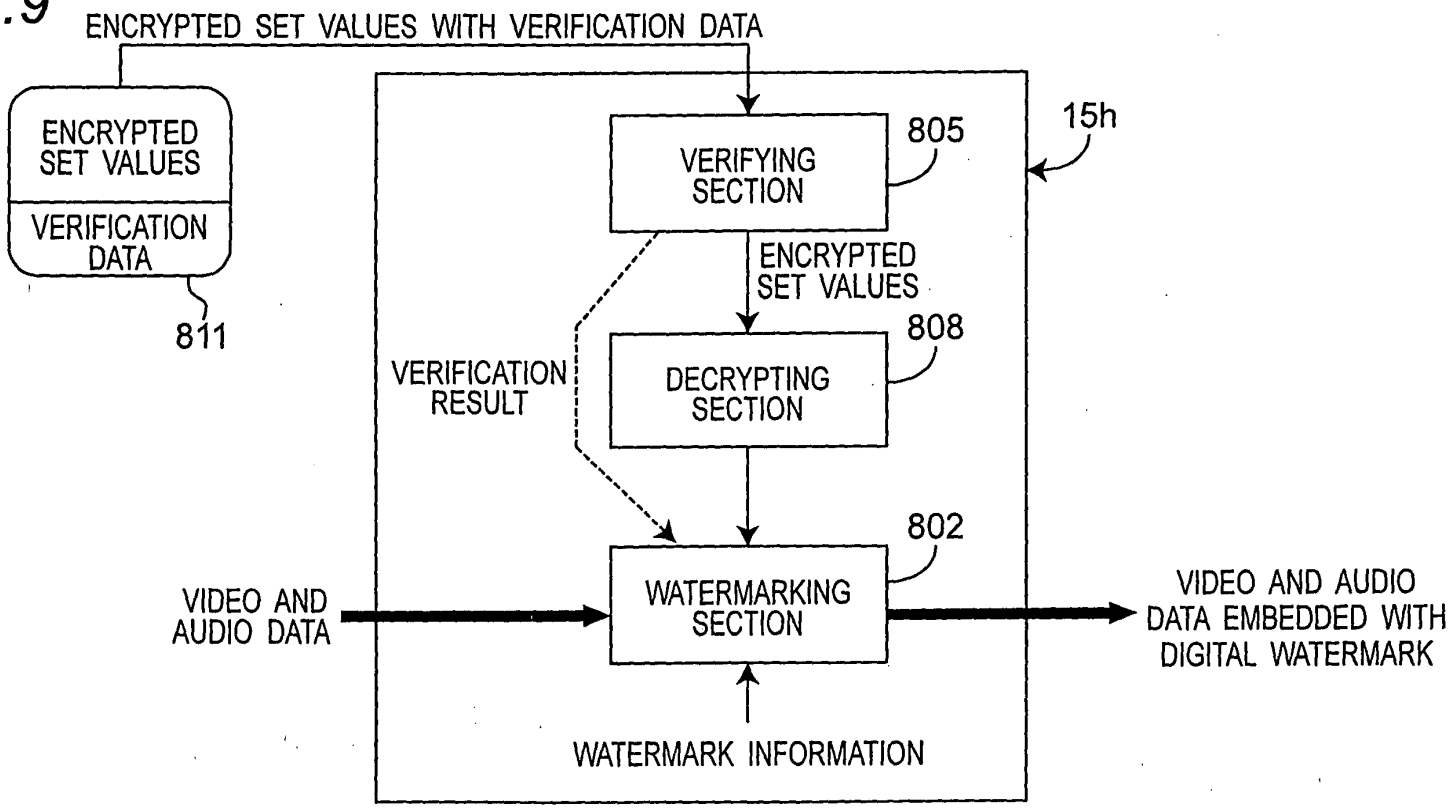

ENCRYPTED SET VALUES WITH VERIFICATION DATA
ENCRYPTED SET VALUES
VERIFICATION DATA
811
15h
VERIFYING SECTION
805
ENCRYPTED SET VALUES
808
VERIFICATION RESULT
DECRYPTING SECTION
802
VIDEO AND AUDIO DATA
WATERMARKING SECTION
VIDEO AND AUDIO DATA EMBEDDED WITH DIGITAL WATERMARK
WATERMARK INFORMATION

Fig.10

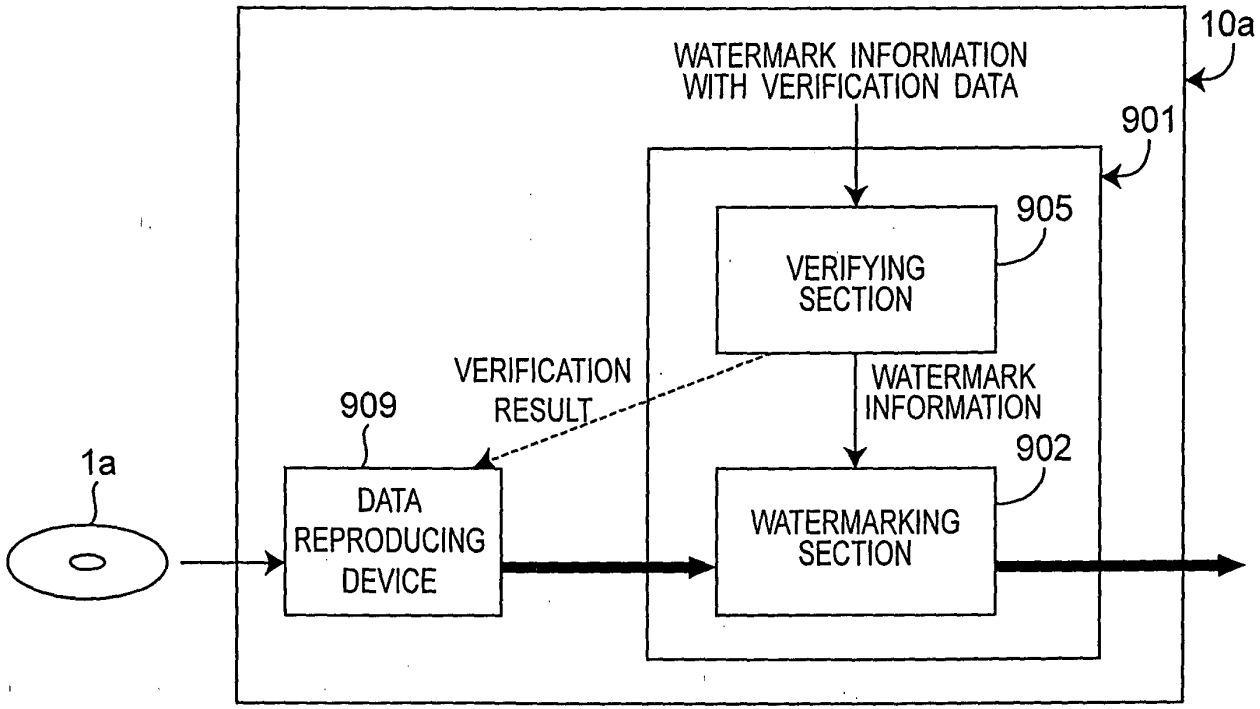

10a
WATERMARK INFORMATION
WITH VERIFICATION DATA
901
905
VERIFYING
SECTION
VERIFICATION
RESULT
WATERMARK
INFORMATION
909
902
1a
DATA
REPRODUCING
DEVICE
WATERMARKING
SECTION

Fig.11

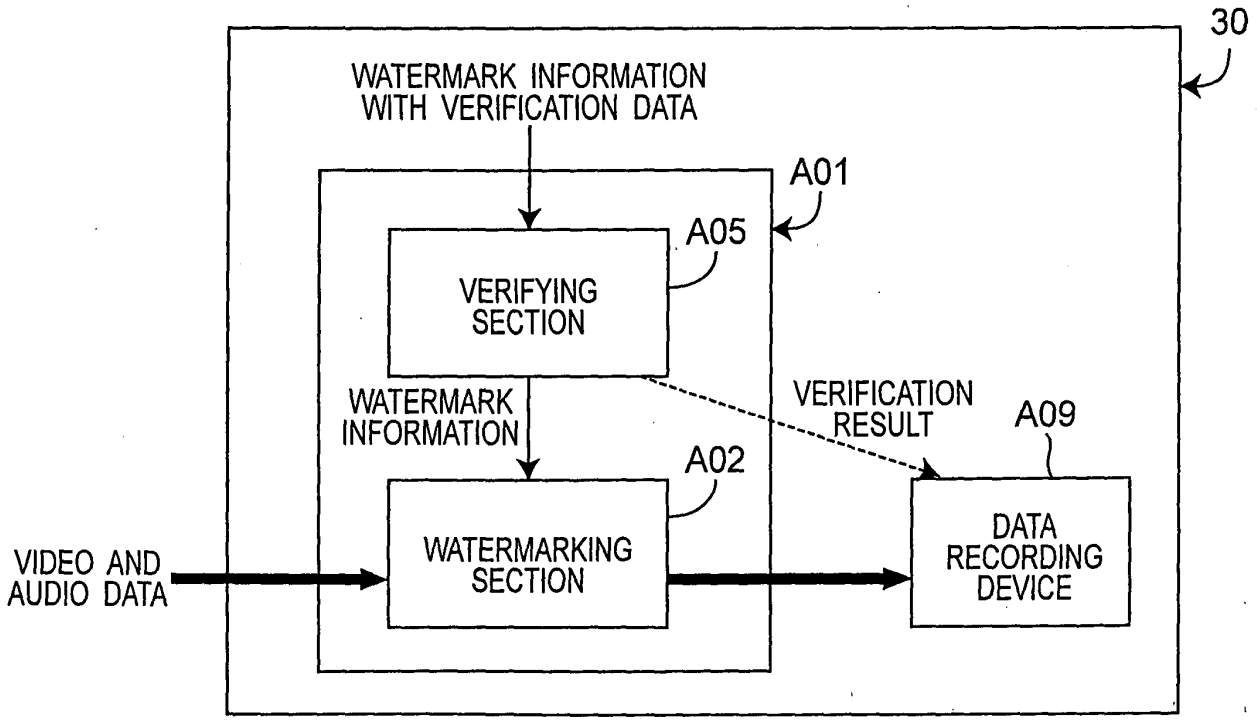

30
WATERMARK INFORMATION
WITH VERIFICATION DATA
A01
A05
VERIFYING
SECTION
WATERMARK
INFORMATION
VERIFICATION
RESULT
A09
A02
VIDEO AND
AUDIO DATA
WATERMARKING
SECTION
DATA
RECORDING
DEVICE

Fig.12

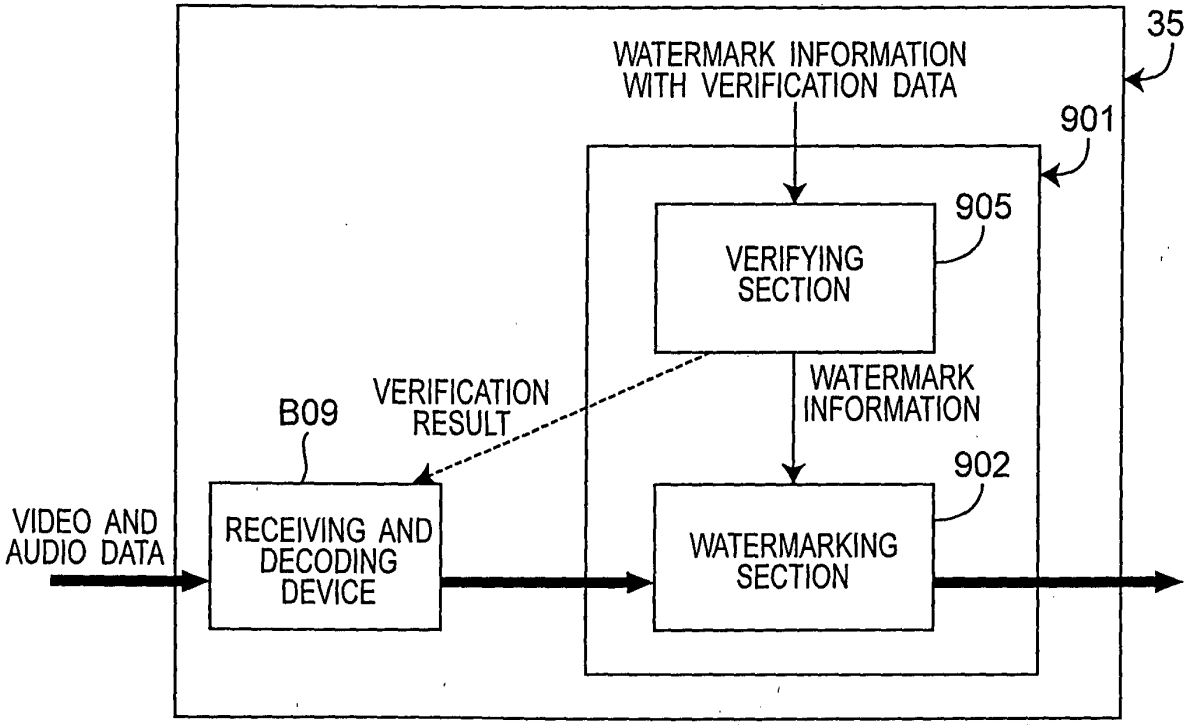
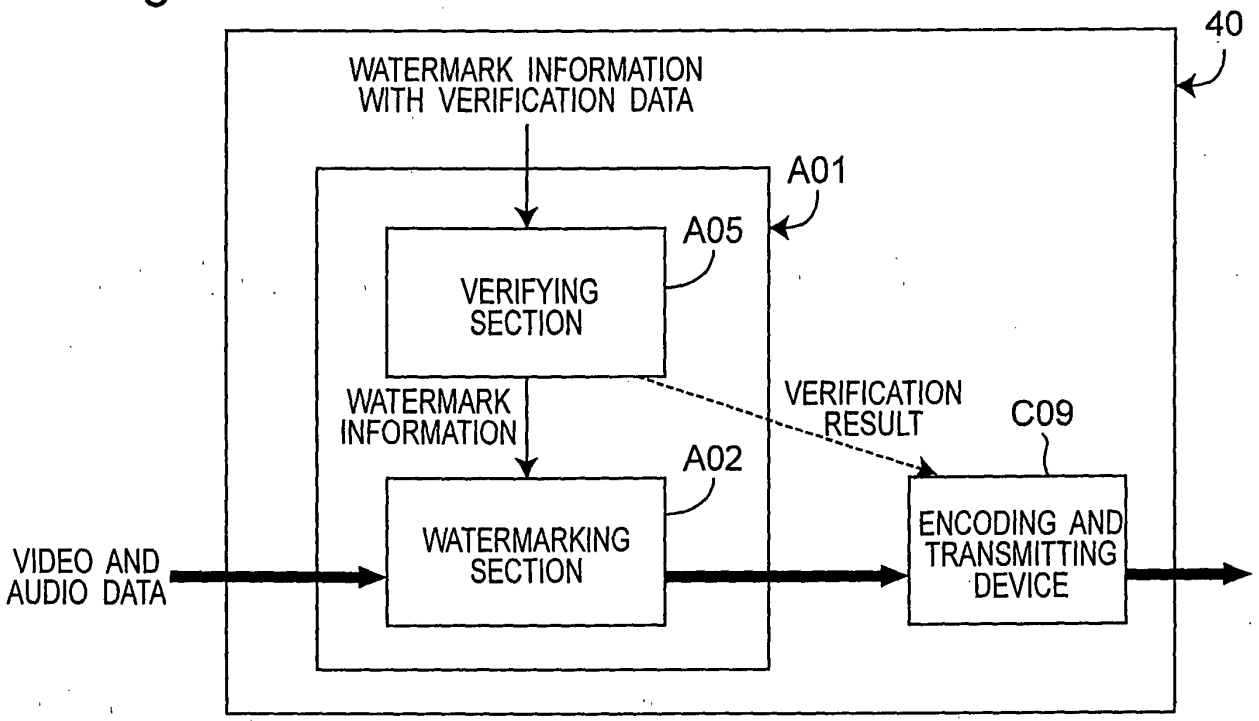

35
WATERMARK INFORMATION
WITH VERIFICATION DATA
901
905
VERIFYING
SECTION
WATERMARK
INFORMATION
VERIFICATION
RESULT
B09
902
VIDEO AND
AUDIO DATA
RECEIVING AND
DECODING
DEVICE
WATERMARKING
SECTION

Fig.13


40
WATERMARK INFORMATION WITH VERIFICATION DATA
A01
A05
VERIFYING SECTION
WATERMARK INFORMATION
VERIFICATION RESULT
C09
A02
WATERMARKING SECTION
ENCODING AND TRANSMITTING DEVICE
VIDEO AND AUDIO DATA